W20-7B (OPTIONAL IF 40 MPH OR LESS) 50' TO 100' 50' TO 100' 6 DEVICE 6 DEVICE MIN. MIN. R WORK AREA **1** 50' TO 300' W20-7B (OPTIONAL IF 40 MPH OR LESS) W20-7B (OPTIONAL IF 40 MPH OR LESS)

NOTES:

- 1. ALL SIGNS ARE BLACK ON ORANGE
- 2. EXTENDING THE CHANNELIZING DEVICE TAPER ACROSS SHOULDER IS RECOMMENDED.
- 3. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS. SEE THE STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
- 4. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

- **▶** FLAGGING STATION
- **IN TEMPORARY SIGN LOCATION**
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE

BUFFER DATA				
LONGI	TUDINAL BU	JFFER SPACE	E = B	
SPEED (MPH)	25	30	35	40
LENGTH (feet)	155	200	250	305
BUFFER VEI	HICLE ROLL	AHEAD DIST	ANCE = R	
TRANSPORTABLE ATTENUATOR				
MINIMUM HOST VEHICLE WEIGHT 15,000 LBS. THE MAXIMUM WEIGHT SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION			30 FEET 100 FEE	
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA		NO SPE DISTANCE		

CHANNELIZATION DEVICE SPACING (feet)			
MPH TAPER TANGE			
35/45	10 to 20	60	
25/30 10 to 20 40			

SIGN SPACING = X (1)				
RURAL ROADS & URBAN	35/ 40 MPH	350'+		
ARTERIALS				
RURAL ROADS, URBAN	25/ 30 MPH	200'+ (2)		
ARTERIALS, RESIDENTIAL &		_		
BUSINESS DISTRICTS				
URBAN STREETS	25 MPH OR	100'+ (2)		
	LESS			

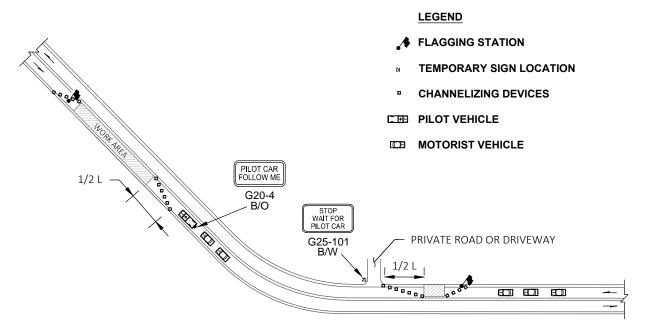
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



STANDARD DETAIL NUMBER: 901 | SCALE: NOT TO SCALE

One-lane, Two-way Traffic Control
With Flaggers



- 1. REFER TO SHEET TC1 FOR ADDITIONAL SIGNING AND FLAGGING DETAILS NOT SHOWN.
- 2. CHANNELIZING DEVICES ARE RECOMMENDED ALONG CENTERLINE TO SEPARATE TRAFFIC FROM WORK OPERATION. DEVICES ARE REQUIRED AT TAPERS TO SHIFT TRAFFIC MOVEMENT BETWEEN LANES AND TO PROTECT ALL FLAGGING STATIONS.
- 3. SIGN G25-101 IS RECOMMENDED FOR NON-STOP SIGN CONTROLLED APPROACHES SUCH AS PRIVATE ROADS AND DRIVEWAYS . THIS SIGN IS NOT REQUIRED TO BE ALUMINUM SUBSTRATE AND CAN BE MADE OF ALTERNATIVE MATERIALS.

CHANNELIZATION DEVICE SPACING (feet)			
MPH	TANGENT		
35/45	10 to 20	60	
25/30	10 to 20	40	

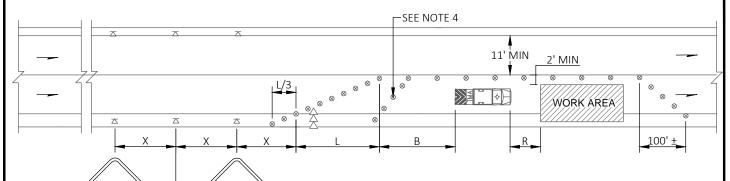
MINIMUM TAPER LENGTH = L (feet)					
LANE WIDTH (feet)	POSTED SPEED (mph)				
(1000)	25	30	35	40	
10	105	150	205	270	
11	115	165	225	295	
12	125	180	245	320	

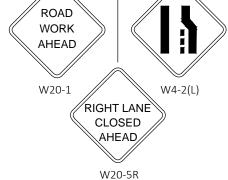


REVISION DATE: 12/19/18

PUBLICATION DATE:3/1/19







MINIMUM LANE CLOSURE **TAPER LENGTH = L (feet)** LANE POSTED SPEED (mph) WIDTH (feet) 25 30 35 40 10 105 150 205 270 11 115 165 225 295 125 180 245 320

LEGEND

- ▼ TRAFFIC SAFETY DRUM

TRANSPORTABLE ATTENUATOR

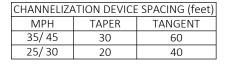
MINIMUM SHOULDER TAPER					
LENGTH = L/3 (feet)					
SHOULDER WIDTH	POS	STED SP	EED (m	ph)	
(feet)	25 30 35 40				
8	40	40	60	90	
10	40	60	90	90	

SIGN SPACING = X (1)				
RURAL ROADS & URBAN ARTERIALS	35/40	350'±		
	MPH	330 <u>±</u>		
RURAL ROADS, URBAN ARTERIALS,	25/30	200'± (2)		
RESIDENTIAL & BUSINESS DISTRICTS	MPH	200 ± (2)		
URBAN STREETS	25 MPH 100'± (2			
	OR LESS	100 1 (2)		
(4) ALL CDA CINIC MANY DE ADULICTED TO ACCOMMANDATE				

- (1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
- (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

BUFFER DATA					
LONGIT	UDINAL BUF	FER SPACE =	= B		
SPEED (MPH)	25	30	35	40	
LENGTH (feet) 155 200 250 305					
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
TRANSPORTABLE ATTENUATOR					
MINIMUM HOST VEHICLE WEIGHT 15,000 LBS.			30 FEET	MIN TO	
THE MAXIMUM WEIGHT SHALL BE IN		100 FEE	T MAX		
ACCORDANCE WITH THE MANUFACTURERS					

REVISION DATE: 1/2/19



NOTES:

- 1. NO FLAGGERS OR SPOTTERS.
- 2. EXTEND DEVICE TAPER AT L\3 ACROSS SHOULDER.
- 3. DEVICES SHALL NOT ENCROACH INTO THE ADJACENT LANE.
- 4. USE TRAVERSE DEVICES IN CLOSED LANE EVERY 1000' (RECOMMENDED).
- 5. DEVICES SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20'.
- 6. ALL SIGNS ARE BLACK ON ORANGE.
- 7. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER

RECOMMENDATION

PUBLICATION DATE:3/1/19



STANDARD DETAIL NUMBER: 903 | SCALE: NOT TO SCALE

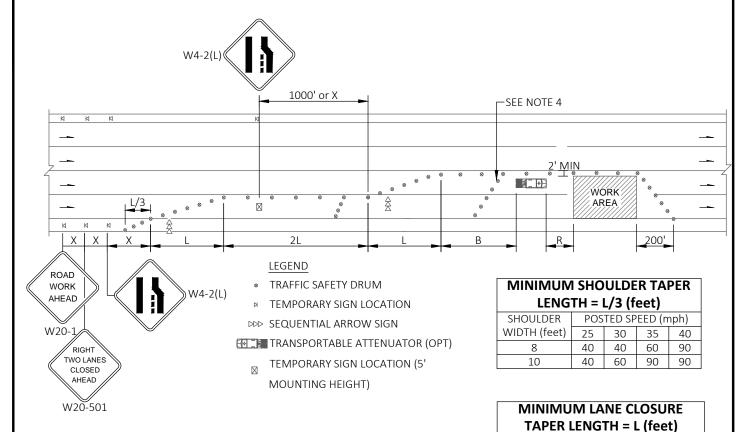
Single-lane Closure For Multi-lane Roadways

35/ 40 MPH	350'±
25/ 30 MPH	200'± (2)
25 MPH OR LESS	100'± (2)
	· '.

|(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

CHANNELIZATION DEVICE			
SPACING (feet)			
MPH TAPER TANGENT			
35/45 30 60			
25/30	20	40	



NOTES:

- 1. NO FLAGGERS OR SPOTTERS.
- 2. EXTEND DEVICE TAPER AT L\3 ACROSS SHOULDER.
- 3. DEVICES SHALL NOT ENCROACH INTO THE ADJACENT LANE.
- 4. USE TRAVERSE DEVICES IN CLOSED LANE EVERY 1000' (RECOMMENDED).

REVISION DATE: 1/2/19

- 5. DEVICES SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20'.
- 6. ALL SIGNS ARE BLACK ON ORANGE.
- 7. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

BUFFER DATA						
LON	IGITUDINAL BUFFE	R SPACE = B				
SPEED (MPH)	SPEED (MPH) 25 30 35 40					
LENGTH (feet)	200	250	305			
BUFFER VEHICLE ROLL AHEAD DISTANCE = R						
TRANSPORTABLE ATTENUATOR						
			30 FEET	MIN TO		
MINIMUM HOST VEHICLE WEIGHT 15,000 LBS. THE MAXIMUM WEIGHT SHALL		100 FEE	T MAX			
BE IN ACCORDANCE WITH THE MANUFA	CTURERS RECOMM	ENDATION				

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER

PUBLICATION DATE:3/1/19

CITY OF
SHORELINE
Public Works

STANDARD DETAIL NUMBER: 904 | SCALE: NOT TO SCALE

LANE WIDTH

(feet)

10

11

25

105

115

125

POSTED SPEED (mph)

35

205

225

245

40

270

295

320

30

150

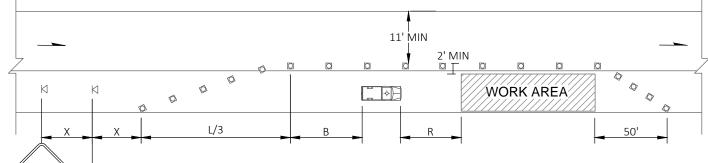
165

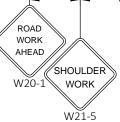
180

Double-lane Closure For Muli-lane Roadways

SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	35/ 40 MPH	350' <u>+</u>
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25/ 30 MPH	200'+ (2)
URBAN STREETS	25 MPH OR LESS	100'+ (2)

- (1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
- (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.





CHANNELIZATION DEVICE SPACING (feet) MPH TAPER TANGENT 35/45 30 60 25/30 20 40

NOTES:

- 1. NO FLAGGERS OR SPOTTERS.
- 2. DEVICES SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20'.
- 3. ALL SIGNS ARE BLACK ON ORANGE.

LEGEND

TEMPORARY SIGN LOCATION

CHANNELIZING DEVICES

PROTECTIVE VEHICLE

MINIMUM SHOULDER TAPER					
LENGTH = L/3 (feet)					
SHOULDER	POSTED SPEED (mph)				
WIDTH (feet)	25	30	35	40	
8	40	40	60	90	
10	40	60	90	90	

BUFFER DATA						
LONGITUDINAL BU	LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	SPEED (MPH) 25 30 35 40					
LENGTH (feet)	155	200	250	305		
BUFFER VEHICLE ROLL	AHEAD DISTAN	CE = R				
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA			NO SPE			

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER

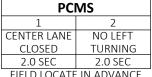
REVISION DATE: 1/4/19

PUBLICATION DATE:3/1/19

CITY OF
SHORELINE
Public Works

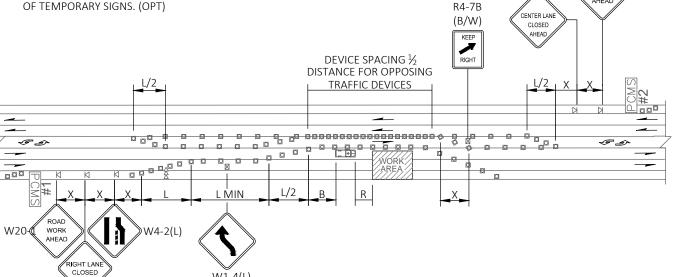
STANDARD DETAIL NUMBER: 905 | SCALE: NOT TO SCALE

Shoulder Closure - Low Speed (40 Mph Or Less)



CHANNELIZATION				
DEVICE	SPACI	NG (feet)		
MPH	TAPER	TANGENT		
35/45	30	60		
25/30	20	40		

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS. (OPT)



NOTES:

1. NO FLAGGER'S OR SPOTTERS.

AHEAD

W20-5R

- 2. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
- 3. FOR POSTED SPEED LIMITS OF 30 MPH OR LESS, USE SIGN W1-3 IN LIEU OF SIGN W1-4.
- 4. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.
- 5. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

LEGEND TEMPORARY SIGN LOCATION

CHANNELIZING DEVICES

SEQUENTIAL ARROW SIGN

PROTECTIVE VEHICLE

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

SIGN SPACING = X (1)				
RURAL ROADS & URBAN ARTERIALS	35/ 40 MPH	350'+		
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25/ 30 MPH	200'+ (2)		
URBAN STREETS 25 MPH OR LESS 100'+				
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.				
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY	CONDITIONS.			

W1-4(L)

MINIMUM TAPER						
LENGTH = L (feet)						
LANE WIDTH	PO:	STED S	PEED (mph)		
(feet)	25	30	35	40		
10	105	150	205	270		
11	115	165	225	295		
12	125	180	245	320		

W20-1

WORK

W20-5C

BUFFER DATA					
LONGITUDINAL BU	JFFER SPACE =	В			
SPEED (MPH) 25 30 35 40					
LENGTH (feet)	155	200	250	305	
BUFFER VEHICLE ROLL	BUFFER VEHICLE ROLL AHEAD DISTANCE = R				
PROTECTIVE VEHICLE - MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO NO SPECIFIED				CIFIED	
SHIELD THE WORK AREA			DISTANCE F	REQUIRED	
TRANSPORTATION ATTENUATOR - MINIMUM HOST VEHICLE WEIGHT 15,000 LBS.				1IN - 100	
THE MAXIMUM WEIGHT SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS			FEETI		
RECOMMENDATION.		RECOMMENDATION.			

APPROVED BY: TRICIA JUHNKE CITY ENGINEER

REVISION DATE: 1/4/19

PUBLICATION DATE:3/1/19



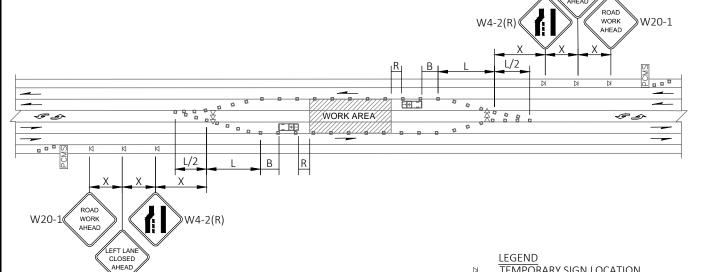
STANDARD DETAIL NUMBER: 906 | SCALE: NOT TO SCALE

Right Lane Closure With Shift - 5 **Lane Roadway**

PCMS			
1 2			
CENTER LANE	NO LEFT		
CLOSED	TURNING		
2.0 SEC 2.0 SEC			
LIELD LOCATE IN ADVANCE			

CHANNELIZATION				
DEVICE	E SPACI	NG (feet)		
MPH	TAPER	TANGENT		
35/45	30	60		
25/20	20	40		

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS. (OPT)



NOTES:

- 1. NO FLAGGER'S OR SPOTTERS.
- 2. ALL SIGNS ARE BLACK ON ORANGE.
- 3. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

	LEGEND
N	TEMPORARY SIGN LOCATION

W20-5L

- CHANNELIZING DEVICES
- SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE
- PORTABLE CHANGEABLE MESSAGE SIGN

SIGN SPACING = X (1)					
RURAL ROADS & URBAN ARTERIALS	35/ 40 MPH	350'+			
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25/ 30 MPH	200'+ (2)			
URBAN STREETS 25 MPH OR LESS 100'+ (:					
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.					
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.					

MINIMUM TAPER LENGTH = L (feet)				
LANE WIDTH	1 602160 26660 ([[[0]]])			
(feet)	25	30	35	40
10	105	150	205	270
11	115	165	225	295
12	125	180	245	320

BUFFER DATA					
LONGITUD	INAL BUFFER S	SPACE = B			
SPEED (MPH)	25	30	35	40	
LENGTH (feet)	155	200	250	305	
BUFFER VEHICL	E ROLL AHEAD	DISTANCE = R			
PROTECTIVE VEHICLE - MAY BE A WORK VEHICLE STRATEGICALLY NO SPECIFIED					
LOCATED TO SHIELD THE WORK AREA DISTANCE REQUIR					
TRANSPORTATION ATTENUATOR - MINIMUM HOST VEHICLE			30 FEET N	AINI 100	
WEIGHT 15,000 LBS. THE MAXIMUM WEIGHT SHALL BE IN			FEET		
ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION.				IVIAA	

APPROVED BY: TRICIA JUHNKE CITY ENGINEER

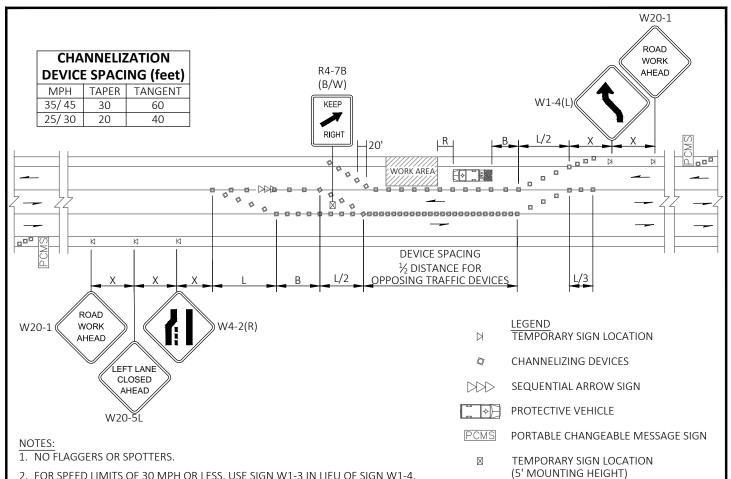
REVISION DATE: 1/4/19

PUBLICATION DATE:3/1/19



STANDARD DETAIL NUMBER: 907 | SCALE: NOT TO SCALE

Left Lane And Center Turn Lane Closure - 5 Lane Roadway



- 2. FOR SPEED LIMITS OF 30 MPH OR LESS, USE SIGN W1-3 IN LIEU OF SIGN W1-4.
- 3. RECOMMENDED EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
- 4. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.
- 5. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

MINIMUM TAPER						
LEI	NGT	H = L	(feet)		
LANE WIDTH	PO:	STED S	SPEED (mph		
(feet)	25	30	35	40		
10	105	150	205	270		
11	115	165	225	295		
12	125	180	245	320		

SIGN SPACING = X (1)				
RURAL ROADS & URBAN ARTERIALS	35/ 40 MPH	350'+		
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25/ 30 MPH	200'+ (2)		
URBAN STREETS	25 MPH OR LESS	100'+ (2)		
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.				
(2) THIS SPACING MAY BE REDUCED IN LIBRANI AREAS TO FIT ROADWAY CONDITIONS				

BUFFER DATA					
LONGITUD	INAL BUFFER S	SPACE = B			
SPEED (MPH)	25	30	35	40	
LENGTH (feet)	155	200	250	305	
BUFFER VEHICL	E ROLL AHEAD	DISTANCE = R			
PROTECTIVE VEHICLE - MAY BE A WORK VEHICLE STRATEGICALLY NO SPECIFIED					
LOCATED TO SHIELD THE WORK AREA DISTANCE REQUIRE					
TRANSPORTATION ATTENUATOR - MINIMUM HOST VEHICLE			20 EEET N	AINI 100	
WEIGHT 15,000 LBS. THE MAXIMUM WEIGHT SHALL BE IN			30 FEET MIN - 10 FEET MAX		
ACCORDANCE WITH THE MANUFACT	URERS RECOM	IMENDATION.		IVIAA	

APPROVED BY: TRICIA JUHNKE CITY ENGINEER

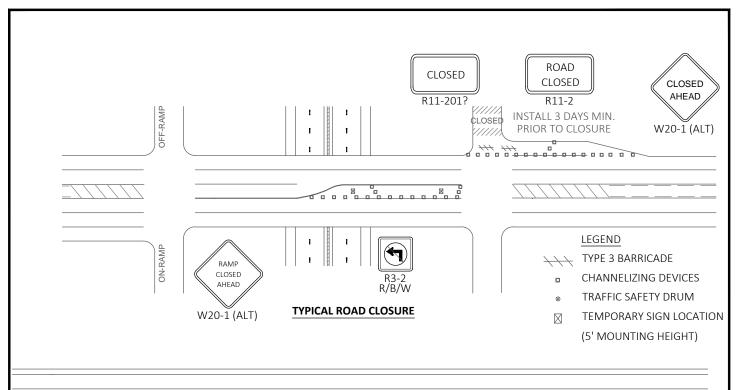
SHÖRELINE Public Works

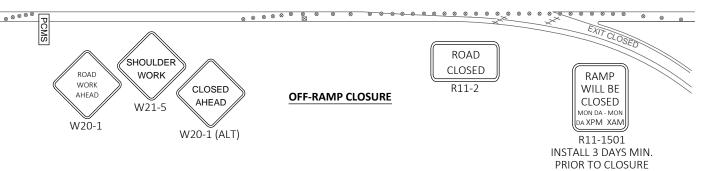
STANDARD DETAIL NUMBER: 908 | SCALE: NOT TO SCALE

Lane Shift - Three Lane Roadway

PUBLICATION DATE:3/1/19

REVISION DATE: 1/4/19





PUBLICATION DATE:3/1/19

- 1. NO FLAGGERS OR SPOTTERS.
- 2. TYPICAL APPLICATION SHOWN, ADJUST FOR SITE CONDITIONS.
- 3. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.
- 4. SEE SPECIAL PROVISIONS FOR CLOSURE HOUR RESTRICTIONS.

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)					
SHOULDER WIDTH	POS	STED SP	EED (m	ph)	
(feet)	25	30	35	40	
8	40	40	60	90	
10	40	60	90	90	

SIGN SPACING = X (1)				
RURAL ROADS & URBAN ARTERIALS	35/ 40 MPH	350'+		
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25/ 30 MPH	200'+ (2)		
URBAN STREETS	25 MPH OR LESS	100'+ (2)		
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTION	AND DDIVEWAY			

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

REVISION DATE: 1/4/19

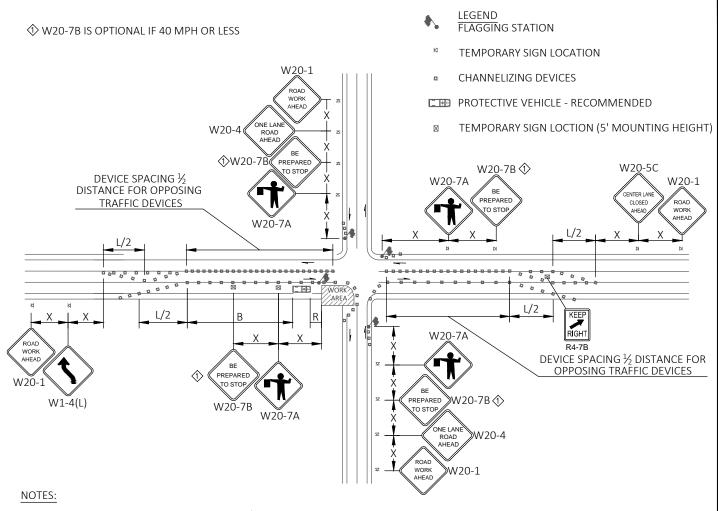
CHANNELIZATION DEVICE SPACING (feet)						
MPH	TAPER	TANGENT				
35/45	30	60				
25/30	20	40				

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER



STANDARD DETAIL NUMBER: 909 | SCALE: NOT TO SCALE

Short Term Ramp Closures

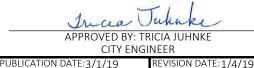


- 1. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
- 2. IF A SIGNAL IS PRESENT, IT SHALL BE SET TO "RED FLASH MODE" OR TURNED OFF DURING FLAGGING OPERATIONS.
- 3. LAW ENFORCEMENT OFFICER MAY BE USED IN LIEU OF FLAGGERS TO CONTROL INTERSECTION TRAFFIC. REQUIRED AT SIGNAL.
- 4. FOR SPEED LIMIT OF 30 MPH OR LESS USE SIGN W1-3 IN LIEU OF SIGN W1-4.
- 5. MAINTAIN A MINIMUM OF ONE ACCESS POINT FOR EACH BUSINESS WITHIN WORK AREA LIMITS.
- 6. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED. MIN LANE WIDTH = 11'.

BUFFER DATA				
LONGITUDINAL BU	FFER SPACE = B			
SPEED (MPH)	25	30	35	40
LENGTH (feet)	155	200	250	305
BUFFER VEHICLE ROLL A	HEAD DISTANCE =	R		
PROTECTIVE VEHICLE - MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA			NO SPECIFIED REQU	
TRANSPORTATION ATTENUATOR - MINIMUM HOST VEHICLE WEIGHT 1 SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS	,		30 FEET MIN - 2	LOO FEET MAX

SIGN SPACING = X (1)					
RURAL ROADS & URBAN ARTERIALS	35/ 40 MPH	350'±			
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25/ 30 MPH	200'± (2)			
URBAN STREETS	25 MPH OR LESS	100'± (2)			
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.					
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.					

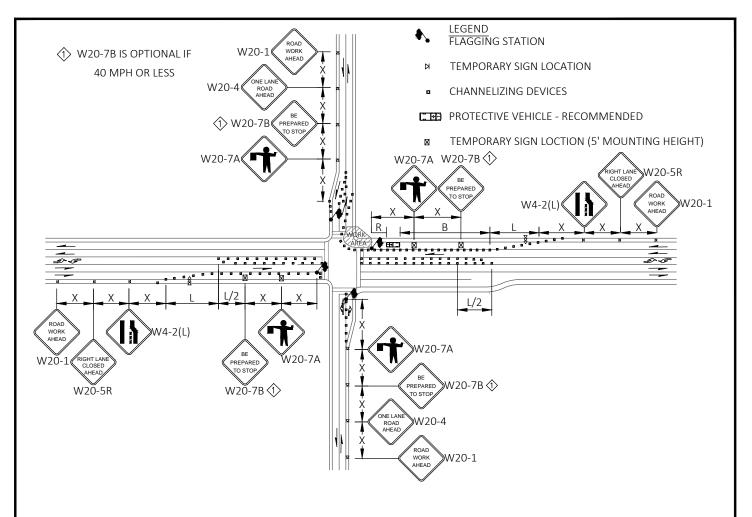
CHANNELIZATION					
DEVICE SPACING (feet)					
MPH	TAPER	TANGENT			
35/45	30	60			
25/30	20	40			





STANDARD DETAIL NUMBER: **910** SCALE: **NOT TO SCALE**

Intersection Lane Closure - Three Lane Roadway



- 1. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
- 2. IF A SIGNAL IS PRESENT, IT SHALL BE SET TO "RED FLASH MODE" OR TURNED OFF DURING FLAGGING OPERATIONS.
- 3. LAW ENFORCEMENT OFFICER MAY BE USED IN LIEU OF FLAGGERS TO CONTROL INTERSECTION TRAFFIC. REQUIRED AT SIGNAL.
- 4. AT SIGNALIZED INTERSECTIONS A MINIMUM OF 2 LAW ENFORCEMENT OFFICERS ARE REQUIRED TO CONTROL THE INTERSECTION.
- 5. FOR SPEED LIMIT OF 30 MPH OR LESS USE SIGN W1-3 IN LIEU OF SIGN W1-4.
- 6. MAINTAIN A MINIMUM OF ONE ACCESS POINT FOR EACH BUSINESS WITHIN WORK AREA LIMITS.
- 7. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED. MIN LANE WIDTH = 11'.

BUFFER DATA				
LONGITUDINAL BU	FFER SPACE = B			
SPEED (MPH)	25	30	35	40
LENGTH (feet)	155	200	250	305
BUFFER VEHICLE ROLL A	AHEAD DISTANCE =	R		
DPOTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOG	PROTECTIVE VEHICLE - MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA NO SPECIFIED DISTANCE			
PROTECTIVE VEHICLE - IMAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA REQUIRED				IRED
TRANSPORTATION ATTENUATOR - MINIMUM HOST VEHICLE WEIGHT 15,000 LBS. THE MAXIMUM WEIGHT			30 FEET MIN - 1	IOO FEFT MAX
SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS	S RECOMMENDATION OF THE RECOMMENDATION OF TH	N.	SOTELI WIIIV	

SIGN SPACING = X (1)			
RURAL ROADS & URBAN ARTERIALS	35/ 40 MPH	350'±	
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25/ 30 MPH	200'± (2)	
URBAN STREETS	25 MPH OR LESS		
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.			
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.			

CHANNELIZATION					
DEVICE SPACING (feet)					
MPH	TAPER	TANGENT			
35/45	30	60			
25/30	20	40			



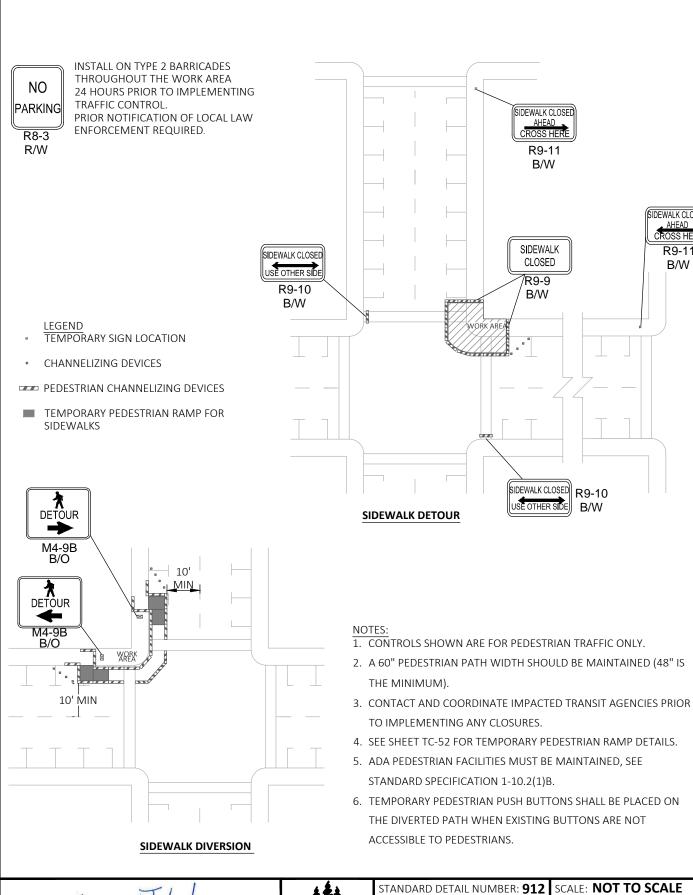
REVISION DATE: 1/7/19

PUBLICATION DATE:3/1/19



STANDARD DETAIL NUMBER: **911** SCALE: **NOT TO SCALE**

Intersection Lane Closure - Five Lane Roadway



APPROVED BY: TRICIA JUHNKE CITY ENGINEER

PUBLICATION DATE:3/1/19 REVISION DATE: 1/7/19



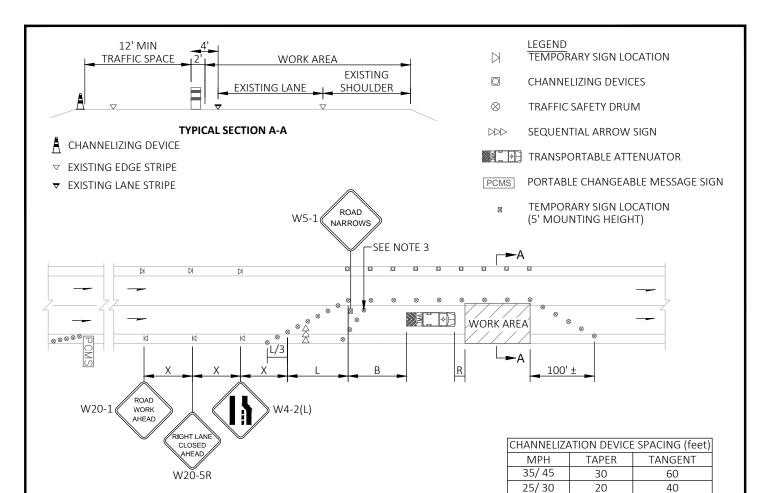
STANDARD DETAIL NUMBER: 912 SCALE: NOT TO SCALE

Intersection Pedestrian Traffic Control

SIDEWALK CLOSED

R9-11

B/W



- 1. CONTROLS SHOWN ARE FOR PEDESTRIAN TRAFFIC ONLY.
- 2. A 60" PEDESTRIAN PATH WIDTH SHOULD BE MAINTAINED (48" IS THE MINIMUM).
- 3. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING ANY CLOSURES.
- 4. SEE SHEET TC-52 FOR TEMPORARY PEDESTRIAN RAMP DETAILS.
- ADA PEDESTRIAN FACILITIES MUST BE MAINTAINED, SEE STANDARD SPECIFICATION 1-10.2(1)B.
- 6. TEMPORARY PEDESTRIAN PUSH BUTTONS SHALL BE PLACED ON THE DIVERTED PATH WHEN EXISTING BUTTONS ARE NOT ACCESSIBLE TO PEDESTRIANS.

MINIMUM LANE CLOSURE TAPER LENGTH = L (feet)				
LANE WIDTH	POSTED SPEED (mph)			
(feet)	25 30 35 40			
10	105	150	205	270
11	115	165	225	295
12	125	180	245	320

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)				
SHOULDER WIDTH	POSTED SPEED (mph)			
(feet)	25	30	35	40
8	40	40	60	90
10	40	60	90	90

BUFFER DATA				
LONGITUDINAL BUFFER SPACE = B				
SPEED (MPH)	25	30	35	40
LENGTH (feet)	155	200	250	305
BUFFER VEH	ICLE ROLL AF	HEAD DISTAI	NCE = R	
TRANSPORTABLE ATTENU	ATOR			
MINIMUM HOST VEHICLE THE MAXIMUM WEIGHT S ACCORDANCE WITH THE I RECOMMENDATION	SHALL BE IN		30 FEET 100 FEE	

REVISION DATE: 1/7/19

SIGN SPACING = X (1)			
35/40	350'±		
MPH	330 <u>T</u>		
25/30	200'± (2)		
MPH	200 ± (2)		
25 MPH	100'± (2)		
OR LESS	100 1 (2)		
	35/ 40 MPH 25/ 30 MPH 25 MPH		

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

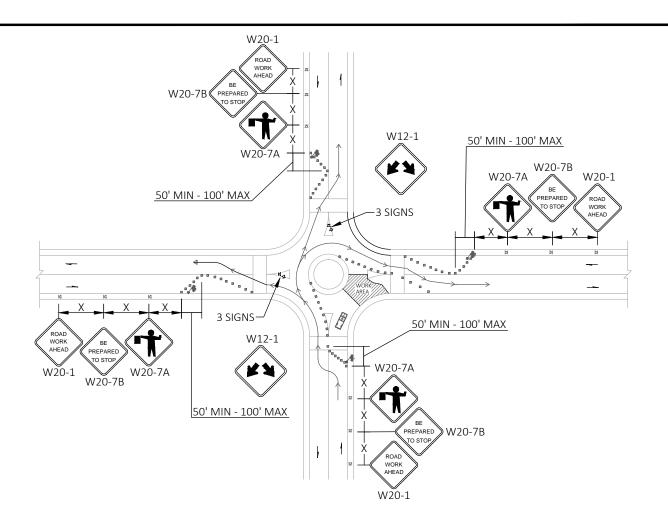
APPROVED BY: TRICIA JUHNKE
CITY ENGINEER

PUBLICATION DATF:3/1/19



STANDARD DETAIL NUMBER: 913 | SCALE: NOT TO SCALE

Single-lane Closure With Shift



- 1. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS, SEE THE STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
- 2. PROTECTIVE VEHICLE RECOMMENDED MAY BE A WORK VEHICLE.
- 3. TYPICAL APPLICATION SHOWN, ADJUST FOR SITE CONDITIONS.

LEGEND

- ♣ FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE RECOMMENDED

CHANNELIZ <i>A</i>	ZATION DEVICE SPACING (feet)			
MPH	TAPER	TANGENT		
35/ 45	30	60		
25/30	20	40		

SIGN SPACING = X (1)			
URAL ROADS & URBAN ARTERIALS 35/40		350'±	
	MPH	330 <u>±</u>	
RURAL ROADS, URBAN ARTERIALS,	25/ 30	200'± (2)	
RESIDENTIAL & BUSINESS DISTRICTS	MPH	200 ± (2)	
URBAN STREETS	EETS 25 MPH		
	OR LESS	100'± (2)	

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER

REVISION DATE: 1/7/19

PUBLICATION DATE:3/1/19



STANDARD DETAIL NUMBER: **914** SCALE: **NOT TO SCALE**

Typical Roundabout Flagging
Operation